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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,867	03/21/2006	John F. Rabolt	UOD-215US	3642
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WILMINGTON, DE 19899				
EXAMINER				
TENTON, LEO B				
ART UNIT		PAPER NUMBER		
1791				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/572,867

**Applicant(s)**

RABOLT ET AL.

**Examiner**

Leo B. Tentoni

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 6-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Claims 15-21 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 30 October 2009.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 6-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senecal et al (U.S. Patent Application Publication 2001/0045547 A1) in combination with Kasai et al (JP 01111007 A).

Senecal et al (see the entire document, in particular, paragraphs [0004], [0010], [0015] and [0020] - [0023]) teaches a process of making a dyed fiber (e.g., for use as textile/fiber reinforcement) including the steps of mixing at least one dye capable of reversibly changing color and at least one polymer into at least one solvent at a temperature below the temperature at which the dye or polymer degrades to form a polymer dye solution, and electrospinning the polymer dye solution to form a fiber wherein the dye penetrates more than the surface of the fiber. Senecal et al does not teach that the dye is a photochromic compound (i.e., a dye that changes color on exposure to radiant energy) (Senecal et al teaches a dye that changes color on exposure to a chemical environment). Kasai et al (see the English-language abstract) teaches a process of making a dyed fiber (e.g., for use in clothes) including the use of a dye that is a photochromic compound, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Senecal et al in view of Kasai et al in order to provide for textile/fiber reinforcement that is capable of changing color upon exposure to radiant energy.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Senecal et al (U.S. Patent Application

Publication 2001/0045547 A1) in combination with Kasai et al (JP 01111007 A) as applied to claims 1, 2, 6-10 and 12-14 above, and further in view of Balkus, Jr. et al (U.S. Patent Application Publication 2003/0168756 A1).

Senecal et al does not explicitly teach the use of polymethyl methacrylate polymer in the manufacture of a dyed fiber (Senecal et al teach the use of polymers in the manufacture of a dyed fiber). Balkus, Jr. et al (see the entire document, in particular, paragraphs [0060], [0064], [0067] and [0100]) teaches a process of making a dyed fiber including the use of polymethyl methacrylate polymer, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Senecal et al in view of Balkus, Jr. et al in order to manufacture a dyed fiber from polymethyl methacrylate polymer (i.e., substituting one known polymer (e.g., polymethyl methacrylate) for other known polymers would have yielded predictable results (e.g., the manufacture of a dyed fiber from a desired polymer) to one of ordinary skill in the art at the time the invention was made).

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 2 and 6-14 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant argues (pages 5 and 6) that Senecal et al does not teach the use of a photochromic dye (i.e., a dye that changes color on exposure to radiant energy), but rather a dye that

changes color on exposure to a chemical environment. Examiner agrees about the teaching of Senecal et al, and notes that Kasai et al teaches the use of a photochromic dye. Both Senecal et al and Kasai et al are directed to the manufacture of a dyed fiber. The process of Senecal et al finds use in textile/fiber reinforcement and the process of Kasai et al finds use in clothing. The substitution of one known element (i.e., a photochromic dye which is capable of reversibly changing color) for another known element (i.e., a non-photochromic dye which is capable of reversibly changing color) would have yielded predictable results (i.e., the manufacture of a dyed fiber which contains a dye which is capable of reversibly changing color) to one of ordinary skill in the art at the time the invention was made. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention to use a photochromic dye in the process of Senecal et al in view of Kasai et al in order to provide for textile/fiber reinforcement that is capable of changing color upon exposure to radiant energy.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this

action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leo B. Tentoni/  
Primary Examiner, Art Unit 1791